YGMOS Technology CO. LTD

-100V P-Channel Enhancement-Mode MOSFET　　-100V　P 沟道增强型 MOS 管

VDS≤ -100V

RDS(ON), Vgs@-10V, Ids@-1A ≤ 650mΩ

RDS(ON), Vgs@-4.5V, Ids@-0.5A ≤ 700mΩ

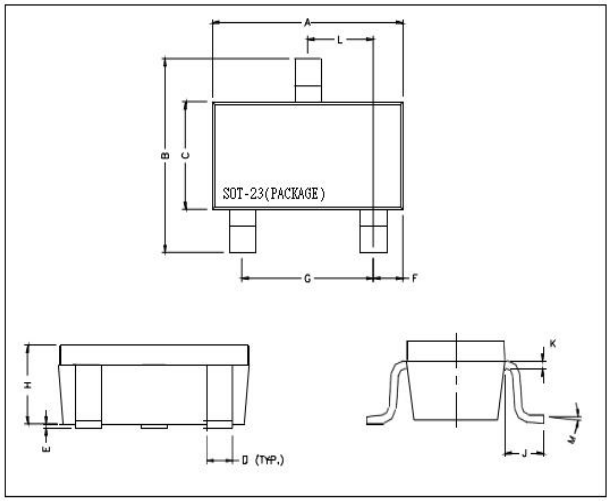
Features　特性

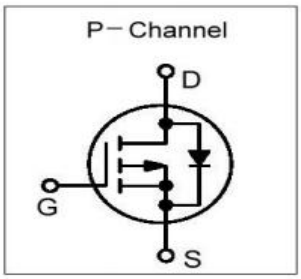
Advanced trench process technology　高级的加工技术

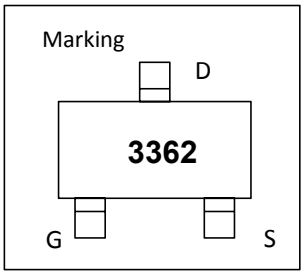
High Density Cell Design For Ultra Low On-Resistance　极低的导通电阻高密度的单元设计

Improved ShootThrough FOM　改进的成型工艺

Package Dimensions　　封装尺寸及外形图







REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.7	3.1	G	1.9 REF.	
B	2.4	2.8	H	1	1.3
C	1.4	1.6	K	0.1	0.2
D	0.35	0.5	J	0.4	-
E	0	0.1	L	0.85	1.15
F	0.45	0.55	M	0°	10°

Maximum Ratings and Thermal Characteristics (TA = 25oC unless otherwise noted)　25 oC极限参数和热特性

Parameter 极限参数		**Symbol 符号**	**Limit 范围**	**Unit 单位**
Drain-Source Voltage 漏源电压		V_{DS}	-100	V
Gate-Source Voltage 栅源电压		V_{GS}	±20	V
Continuous Drain Current 连续漏极电流		I_D	-1	A
Pulsed Drain Current 脉冲漏极电流		I_{DM}	-2	A
Maximum Power Dissipation 最大耗散功率	TA = 25℃	P_D	1	W
	TA = 75℃		0.6	W
Operating Junction and Storage Temperature Range 使用及储存温度		T_J, T_{stg}	-55 to 150	℃
Junction-to-Ambient Thermal Resistance (PCB mounted) 结环热阻		$R_{\theta JA}$	125	℃/W

ELECTRICAL CHARACTERISTICS 一般电气特性						
Parameter 参数	**Symbol 符号**	**Test Condition 测试条件**	**Minimum 最小值**	**Typical 典型值**	**Maximum 最大值**	**Unit 单位**
Static 静态参数						
Drain-Source Breakdown Voltage 漏源击穿电压	BV_{DSS}	V_{GS} = 0V, I_D = -250uA	-100			V
Drain-Source On-State Resistance 漏源导通电阻	$R_{DS(on)}$	V_{GS} = -4.5V, I_D =- 0.5A		570	700	mΩ
Drain-Source On-State Resistance 漏源导通电阻	$R_{DS(on)}$	V_{GS} = -10V, I_D=-1A		520	650	
Gate Threshold Voltage 开启电压	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D = -250uA	-1	-2	-3	V
Zero Gate Voltage Drain Current 零栅压漏极电流	I_{DSS}	V_{DS} =-80 V, V_{GS} = 0V			-1	uA
Gate Body Leakage 漏极短路时截止栅电流	I_{GSS}	V_{GS} = ± 20V, V_{DS} = 0V			±100	nA
Dynamic 动态参数						
Total Gate Charge 栅极总电荷	Q_g	V_{DS} = -15V, I_D = 0.5A V_{GS} = -10V		10		nC
Gate-Source Charge 栅-源极电荷	Q_{gs}			1.4		
Gate-Drain Charge 栅-漏极电荷	Q_{gd}			1.7		
Turn-On Delay Time 导通延迟时间	$t_{d(on)}$	V_{DD} = -50V, V_{GS}=-10V R_G = 3.3Ω, ID = -0.5A		±20		ns
Turn-On Rise Time 导通上升时间	t_r			6		
Turn-Off Delay Time 关断延迟时间	$t_{d(off)}$			38		
Turn-Off Fall Time 关断下降时间	t_f			4		
Input Capacitance 输入电容	C_{iss}	V_{DS} =-15V, V_{GS} = 0V f = 1MHz		531		pF
Output Capacitance 输出电容	C_{oss}			59		
Reverse Transfer Capacitance 反向传输电容	C_{rss}			38		
Source-Drain Diode 源漏二极管参数						
Max. Diode Forward Current 最大正向电流	I_S				-1	A
Diode Forward Voltage 正向电压	V_{SD}	I_S = -2A, V_{GS} = 0V			-1.2	V

Note: Pulse test: pulse width <= 300us, duty cycle<= 2%注意：脉冲测试：脉冲宽度<= 300us死区<= 2%